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(71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): ZHOU, Yu [CN/SG]; c/o Société Civile SPID, 156 Boulevard Haussmann, F-75008 PARIS (FR).

(74) Agent: ROCHE, Denis; Société Civile SPID, 156 Boulevard Haussmann, F-75008 PARIS (FR).

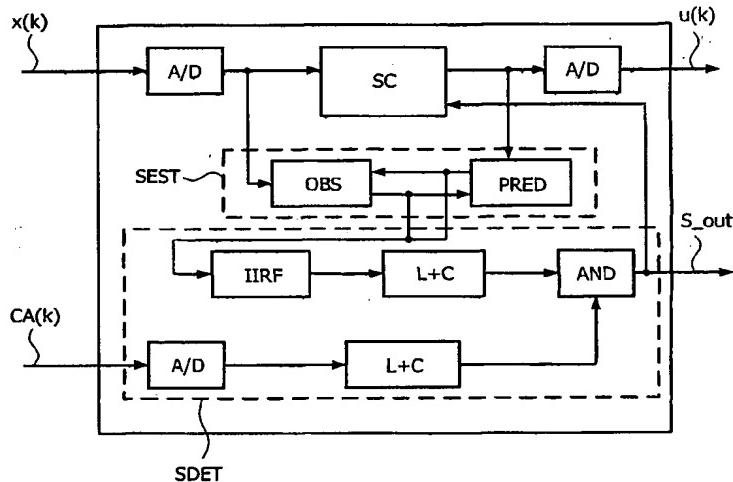
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(54) Title: ANTI-SHOCK OPTICAL RECORDING AND REPRODUCING DEVICE



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(57) Abstract: The present invention relates to an optical recording and reproducing device comprising an optical pick-up unit, position means for moving roughly the optical pick-up unit with respect to a desired position on an optical disc, an actuator for moving the optical pick-up unit relative to the position means in a radial direction of the optical disc, and a servo processor for delivering a control signal (u(k)) from a measured radial error signal (x(k)) derived from the optical pick-up unit. Said servo processor further comprises: - a state estimator (SEST) for delivering an estimated radial error signal ( ) and a predicted radial error signal ( ) on the basis of the measured radial error signal (x(k)) and of the control signal (u(k)); and - a shock detector (SDET) for delivering a shock indication (S\_out) on the basis of the estimated radial error signal, of the predicted radial error signal, and of a sum (CA(k)) of the signals delivered by at least two regions of the optical sensor.



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